


**Firearms Technology Criminal Branch  
Report of Technical Examination**

	<p>244 Needy Road #1600 Martinsburg, WV 25405</p> <p>Phone: 304-616-4300 Fax: 304-616-4301</p>
<p><b>To:</b></p> <p>Special Agent Richard Connors Bureau of Alcohol, Tobacco, Firearms and Explosives 1000 North Water Street Suite 1400 Milwaukee, Wisconsin 53202</p>	<p><b>Date:</b> 4/14/2022</p> <p><b>UI#:</b> 772120-22-0011</p> <p><b>RE:</b> GUERRERO, Mitchell (Ghost Guns Green Bay)</p> <p><b>FTCB#:</b> 2022-185-LPR 318674</p>
<p><b>Date Exhibit Received:</b> 12/16/2021</p> <p><b>Delivered By:</b> FedEx 7754 8793 2169</p>	<p><b>Type of Examination Requested:</b></p> <p>Examination, Test, Classification</p>

**Exhibits:**

1. 3D printed cylindrical device, black in color, no markings or serial number (suspected silencer) with one bag of grommets.
2. Metal cylindrical device, grey in color, no markings or serial number (suspected silencer).
3. 3D printed device, green and white in color, unknown caliber, no markings or serial number (suspected any other weapon).
4. 3D printed TCGTR device, white in color, no markings or serial number (suspected machinegun).

**Pertinent Authority:**

Title 28 of the United States Code (U.S.C.) provides the Bureau of Alcohol, Tobacco Firearms and Explosives (ATF) the authority to investigate criminal and regulatory violations of Federal firearms law at the direction of the Attorney General. Under the corresponding Federal regulation at 28 CFR § 0.130, the Attorney General provides ATF with the authority to investigate, administer, and enforce the laws related to firearms, in relevant part, under 18 U.S.C. Chapter 44 (Gun Control Act) and 26 U.S.C. Chapter 53 (National Firearms Act). Pursuant to the aforementioned statutory and regulatory authority, the ATF Firearms and Ammunition Technology Division (FATD) provides expert technical support on firearms and ammunition to federal, state and local law enforcement agencies regarding the Gun Control Act and the National Firearms Act.

The Gun Control Act of 1968 (GCA), 18 U.S.C. § 921(a)(3), defines the term “**firearm**” to include:

*“... (A) any weapon (including a starter gun) which will or is designed to or may readily be converted to expel a projectile by the action of an explosive; (B) the frame or receiver of any such weapon; (C) **any firearm muffler or silencer** or (D) any destructive device. Such term does not include an antique firearm.”*

**Pertinent Authority (cont.):**

In addition, the GCA, 18 U.S.C. § 921(a)(23), defines the term “**machinegun**” as:

*“The term “machinegun” has the meaning given such term in section 5845(b) of the National Firearms Act (26 U.S.C. 5845(b)).”*

Further, the GCA, 18 U.S.C § 921(a)(24), defines the terms “**firearm silencer**” and “**firearm muffler**” to mean:

*“...any device for silencing, muffling, or diminishing the report of a portable firearm, including any combination of parts, designed or redesigned, and intended for use in assembling or fabricating a firearm silencer or firearm muffler, and any part intended only for use in such assembly or fabrication.”*

The GCA (as amended by the Undetectable Firearms Act of 1988), 18 U.S.C. § 922(p)(1), states “*It shall be unlawful for any person to manufacture, import, sell, ship, deliver, possess, transfer, or receive any firearm— (A) that, after removal of grips, stocks, and magazines, is not as detectable as the Security Exemplar, by walk-through metal detectors calibrated and operated to detect the Security Exemplar...*”

The GCA (as amended by the Undetectable Firearms Act of 1988), 18 U.S.C. § 922(p)(2)(C), specifies the “Security Exemplar” as “*an object, to be fabricated at the direction of the Attorney General, that is— (i) constructed of, during the 12-month period beginning on the date of the enactment of this subsection, 3.7 ounces of material type 17–4 PH stainless steel in a shape resembling a handgun; and (ii) suitable for testing and calibrating metal detectors...*”

The National Firearms Act (NFA), 26 U.S.C. § 5845(a), defines “**firearm**” as:

*“... (1) a shotgun having a barrel or barrels of less than 18 inches in length; (2) a weapon made from a shotgun if such weapon as modified has an overall length of less than 26 inches or a barrel or barrels of less than 18 inches in length; (3) a rifle having a barrel or barrels of less than 16 inches in length; (4) a weapon made from a rifle if such weapon as modified has an overall length of less than 26 inches or a barrel or barrels of less than 16 inches in length; (5) any other weapon, as defined in subsection (e); (6) a **machinegun**; (7) any **silencer (as defined in 18 U.S.C. § 921)**; and (8) a destructive device. The term “firearm” shall not include an antique firearm or any device (other than a machinegun or destructive device) which, although designed as a weapon, the ...[Attorney General]... finds by reason of the date of its manufacture, value, design, and other characteristics is primarily a collector's item and is not likely to be used as a weapon.”*

In addition, the NFA, 26 U.S.C § 5845(b), defines the term “**machinegun**” as:

*“...any weapon which shoots, is designed to shoot, or can be readily restored to shoot, automatically more than one shot, without manual reloading, by a single function of the trigger. The term shall also include the frame or receiver of any such weapon, **any part designed and intended solely and exclusively**, or combination of parts designed and intended, for use in converting a weapon into a machinegun, and any combination of parts from which a machinegun can be assembled if such parts are in the possession or under the control of a person.”*

**Pertinent Authority (cont.):**

Further, the NFA, 26 U.S.C. § 5845(e), defines “**any other weapon**” as “... *any weapon or device capable of being concealedd on the person from which a shot can be discharged through the energy of an explosive, a pistol or revolver having a barrel with a smooth bore designed or redesigned to fire a fixed shotgun shell, weapons with combination shotgun and rifle barrels 12 inches or more, less than 18 inches in length, from which only a single discharge can be made from either barrel without manual reloading, and shall include any such weapon which may be readily restored to fire. Such term shall not include a pistol or a revolver having a rifled bore, or rifled bores, or weapons designed, made, or intended to be fired from the shoulder and not capable of firing fixed ammunition.*”

Finally, the NFA, 26 U.S.C. § 5842, “**Identification of firearms,**” states:

“...*(a) Identification of firearms other than destructive devices. - Each manufacturer and importer and anyone making a firearm shall identify each firearm, other than a destructive device, manufactured, imported, or made by a serial number which may not be readily removed, obliterated, or altered, the name of the manufacturer, importer, or maker, and such other identification as the Secretary may by regulations prescribe. (b) Firearms without serial number. - Any person who possesses a firearm, other than a destructive device, which does not bear the serial number and other information required by subsection (a) of this section shall identify the firearm with a serial number assigned by the Secretary and any other information the ...[latter]... may by regulations prescribe.*”

**Findings:**

As background, ATF has a long history of looking at the design features of a particular item when determining whether an item is a “firearm silencer” under Federal law, including whether it has design features of a part designed to be used in a “firearm silencer.”

The law encompasses any combination of parts designed or redesigned and intended for use in assembling or fabricating a firearm silencer or muffler. Moreover, the statute does not limit the definition of silencer to “a device that silences, muffles, or diminishes.” *United States v. Syverson*, 90 F.3d 227, 232 (7<sup>th</sup> Cir. 1996).

Similarly, in *United States v. Carter* 465 F.3d 658(6<sup>th</sup> Cir.2006), the Sixth Circuit Court of Appeals found that the statute did not require that a silencer actually diminish the report of a firearm, noting that the “language of the statute focuses on the intended application of a silencer, not its actual demonstrated operation.” Congress did not use such wording as “capable of silencing” or “that silences.” The word choice of Congress indicates a concern for the purpose of the mechanism and the parts thereof, not the function.

When ATF examines a possible silencer part, it compares that item to known silencer designs to provide a context for those features and help determine whether the subject item should be classified as a silencer under Federal law. The presence of the design characteristics and reported purpose of the item are important factors in determining whether it should be classified as “any combination of parts, designed or redesigned, and intended for use in assembling or fabricating a firearm silencer or firearm muffler,” or “any part intended only for use in such assembly or fabrication.”

**Findings (cont.):**

A part need not be 100% complete in order to be considered a “silencer part” as regulated under the GCA and NFA. It need only be manufactured to the point where a critical line has been crossed or critical feature(s) formed to make it recognizable as a silencer part. Once completed to the point of recognition, a part must be regulated as the completed silencer part. To find otherwise would lead to a result that permits manufacturers, importers, or dealers, to avoid “completing” a device or silencer part in order to circumvent government regulation specifically intended by Congress.

Therefore, a component, part, assembly, or end item need only be completed to the point at which it can be recognized as a regulated item based on the objective characteristics of that item which identifies the device as a regulated article.

For your information, any part used (or if intent for use is demonstrated) in the assembly of a device for silencing, muffling or diminishing the report of a portable firearm, would be classified as a “firearm silencer” as defined in 18 U.S.C. § 921(a)(24) and a “firearm” as defined in 18 U.S.C. 921 § (a)(3)(C) and 26 U.S.C. § 5845(a)(7) respectively. Therefore, any silencer part not in an assembled silencer is required to be marked with the manufacturer’s information and a serial number as required by 26 U.S.C. § 5842.

There are three audible elements attributable to a firearm in operation, the report (muzzle blast), the sound of the bullet in flight, and the sound of the firearm action. Firearm silencers are designed to reduce only one of these elements, the report.

The report of a firearm is mostly the consequence of superheated, high-pressure propellant gases being rapidly released into the atmosphere. Simplistic silencers typically consist of end-caps attached to each end of a hollow tube, which forms an “expansion chamber” within. The end-caps will each have a hole in the center to allow a bullet, followed by propellant gases, to pass through. The resulting device, when attached to a firearm barrel’s muzzle, allows the hot propellant gases exiting the barrel to expand and cool prior to being slowly released into the open atmosphere. Additional components may serve to aid or enhance silencing, muffling, or diminishing the report of a portable firearm, by further reducing the speed, pressure, or rate of release of the propellant gases.

Typically, these additional components may include:

- Baffles or washers which create separate expansion chambers
- Ported inner sleeve or tube (bleed holes)
- Sound dampening material such as foam, steel wool, and other substances

**Baffles** in firearms silencers are designed to slow, create turbulence in, or redirect the flow of hot propellant gases, depending upon the baffle’s particular design features. Further, baffles can be used to segregate a large expansion chamber to create multiple, smaller expansion chambers of various sizes by stacking several baffles together or by the use of spacers between baffles.



**Findings (cont.):**

A “**monolithic baffle core**” or “**monocore baffle**” is a silencer part consisting of a series of integral **expansion chambers** separated by baffles designed to aid in capturing, cooling, diverting, diffusing, and slowing the hot gases created by burning propellant powder. Monolithic baffle cores, as the name implies, are typically cast or machined from a single piece of metal or stock and are designed to be enclosed by an outer tube to contain the expanding hot gases upon a shot being fired from a portable firearm.

**Exhibit 1** is a 3D printed cylindrical device, black in color, measuring approximately 5-3/8 inches in overall length, and having an outside diameter of approximately 1-3/4 inches at its major diameter. As received, Exhibit 1 includes a bag of metal grommets. My examination revealed that Exhibit 1 has no NFA markings in accordance with 26 U.S.C. § 5842.

The Exhibit is comprised of a front end-cap and an outer tube. The front end-cap is molded into the main body of the outer tube and has a hole at its center approximately 1/4 inch in diameter and is surrounded by eight additional holes approximately 1/16 inch in diameter. The rear portion of the device contains a hole in its center, approximately 1/4 inch in diameter, and has a metal washer emplaced within the rearmost portion of the device.

The interior construction of Exhibit 1 was viewed with a lighted bore-scope. Internally, the Exhibit consists of an expansion chamber and seven baffles. The baffles partition the larger expansion chamber of the device and create multiple smaller expansion chambers. The blast chamber allows the propellant gases to expand prior to flowing through the smaller chambers created by the baffles (see attached photos). These features are designed to aid in capturing, cooling, diverting, diffusing, and slowing the hot gases created by burning propellant powder.

Exhibit 1 as received, having an outer tube, front end-caps, baffles and an expansion chamber is therefore a “**firearms silencer**” or “**firearms muffler**” as defined.

Sound comparison testing could not be completed due to not having a compatible adaptor in the National Firearms Collection (NFC).

**Exhibit 2** is a metal cylindrical device, grey in color, approximately 6 inches in overall length, and has an outside diameter of approximately 1-3/8 inches at its major diameter. As received, Exhibit 2 includes a section of rubber hose and an additional unfinished front end-cap (hereafter referred to as Exhibit 2A). My examination revealed that Exhibit 2 has no markings of identification or serial number in accordance with 26 U.S.C. § 5842.

Disassembly of the Exhibit revealed that the interior of the device consists of a “monolithic baffle core” silencer baffle, an outer tube, and a front end-cap. The front end-cap is machined with multiple indentions around the perimeter to accept a wrench for use in assembly/disassembly. The Exhibit 2 monocore baffle is internally threaded at the rear end and has external threads at the front end. There are 1/2 x 28 threads per inch (TPI) at the rear to facilitate attaching the device to a firearm barrel. The threads at the front are compatible with the front end-cap of the device. There is a hole machined longitudinally through the center that is approximately 1/2-inch in diameter to allow passage of a bullet. The tube included with the Exhibit is approximately 5-5/16 inches in length; has an interior diameter of 1-3/16 inches; is designed to slip over the exterior of the baffle; is retained

**Findings (cont.):**

against the rear end of the baffle by the front end-cap; and creates eight separate expansion chambers within the device (see attached photos). These features are designed to aid in capturing, cooling, diverting, diffusing, and slowing the hot gases created by burning propellant powder.

Exhibit 2 contains a monolithic core which creates multiple expansion chambers within the device. These features are designed to aid in capturing, cooling, diverting, diffusing, and slowing the hot gases created by burning propellant powder.

As received, Exhibit 2 is a device for silencing, muffling, or diminishing the report of a portable firearm; therefore, Exhibit 2 is a “**firearm silencer**” as defined.

For sound-comparison test purposes, I used a Ruger, Model 22/45, .22 caliber semiautomatic pistol from the NFC, serial number 220-78000, with and without Exhibit 2 attached. I conducted the sound-comparison testing at the ATF test range, in Martinsburg, West Virginia, on December 17, 2021, using commercially available, CCI brand, .22 LR caliber ammunition. I conducted this test in the presence of a Bruel & Kjaer, Nexus Acoustic Conditioner Amplifier, calibrated precision sound-level meter, and recorded the results. I used a threaded adapter on the barrel of the NFC Ruger to attach the Exhibit for testing. I followed the standard operating procedures established by ATF for conducting the testing. During this procedure, a pre and post self-test calibration verification procedure was automatically conducted. The instrument passed both the pre and post self-test calibration verifications. The results of the testing are as follows:

NFC Ruger with no silencer	(5-shot average)	157.31 decibels
NFC Ruger with Exhibit 2 attached	(5-shot average)	142.48 decibels

The sound reduction recorded was 14.83 decibels. The test results establish that Exhibit 2 is capable of diminishing the sound report of a portable firearm.

**Exhibit 2A** is a front end-cap designed for use in place of the tube retaining nut mentioned above. Typically, these devices are shipped with the closed end-cap attached to the front of the monocoire baffle. Exhibit 2A end-cap has no path for a bullet to pass through but is marked at the center to indicate the correct location for drilling such a hole. Having no center hole is advantageous to the end-user as the center hole can be drilled to the size desired in order to improve the efficiency of the device. Reducing the center hole diameter to a size close to that of the bore size of the firearm typically improves the efficiency of a firearm silencer. Exhibit 2A, in and of itself, being a part intended only for use in assembling a firearm silencer, is a “**firearm silencer**” as defined.

**Exhibit 3** is a 3D printed firearm referred to on the internet as the “WASHBEAR”. The assembled firearm has eight barrels containing 3D printed hexagonal rifling capable of chambering a .22 rimfire caliber cartridge. As received, the Exhibit was accompanied by two 3D printed trigger assemblies and an additional eight shot barrel assembly.

During my examination, I observed the following markings on Exhibit 3:

**Findings (cont.):**Top of Exhibit

- **WASHBEAR**

Right side of Exhibit

- **PATRICK**

The publicly available plans for the “WASHBEAR” reveal that the Exhibit is designed to utilize stainless steel chamber inserts to facilitate the use of .22 caliber ammunition. The design also incorporates a 1-inch roofing nail as the firing pin and utilizes several rubber bands to propel the firing pin/striker assembly enabling the double-action trigger to function.

Disassembly revealed Exhibit 3, as submitted, required a firing pin, several replacement rubber bands, and the stainless steel chamber inserts. In addition, I determined that the bore of the barrel, while rifled, was oversized at 0.229 inch to 0.242 inch in diameter, exceeding the diameter of a .22 rimfire cartridge (0.225 inch in diameter) eliminating the barrel’s ability to impart a spin on the projectile.

I noted that the “WASHBEAR” design also incorporates a cavity intended for a 4.0 oz. metal block, other than this, the “WASHBEAR” is comprised entirely of polymer material. Regardless of the design, no metal has been incorporated into the construction of Exhibit 3.

Exhibit 3, as received, has reached a stage of manufacture where it is recognized as and designed to expel a projectile by the action of an explosive; therefore, Exhibit 3 is a “**firearm**” as defined in the GCA. In addition, being not as detectable as the Security Exemplar, the Exhibit is an “**undetectable firearm**” as defined.

In order to test-fire the Exhibit, I replaced the trigger assembly rubber band with a heavy-duty 1/4-inch dental rubber band and replaced the firing pin assembly rubber band with ten heavy-duty 1/4- inch dental rubber bands. In addition, I fabricated a firing pin from a 1-3/4 inch roofing nail. Utilizing a file and a Dremel tool equipped with a cut-off wheel, I fabricated a firing pin in fifteen minutes. To take the place of the stainless steel inserts that support the .22 rimfire casings, I utilized a set of needle nose pliers and modified several commercially available 1/4-inch retaining rings within five minutes (see photos).

I successfully test-fired Exhibit 3 on February 22, 2022, at the ATF test range, Martinsburg, West Virginia, using commercially available, CCI brand, .22 CB Short ammunition.

I loaded one round of ammunition into each chamber and installed the barrel assembly, I then pulled the trigger eight separate times. Exhibit 3 successfully expelled two projectiles out of the eight rounds of ammunition loaded, by the action of an explosive for each single function of the trigger. Due to the number of failures to fire the Exhibit demonstrated; no further testing was completed to preserve the integrity of the Exhibit.

Utilizing a sheet of butcher block paper as a target during the test-fire portion of the examination revealed that although the barrels of the Exhibit appear to have hexagonal rifling, the rifling did not impart a spin on the expelled projectile as evidence of the side impacts on the paper target at seven yards (see photo).

**Findings (cont.):**

In addition to test-firing, Exhibit 3 was also tested to determine whether it was as detectable as the security exemplar in a walk-through metal detector, pursuant to 18 U.S.C. § 922(p). Utilizing the walk-thru metal detector located at the Security checkpoint at the ATF National Services Center located at Martinsburg, WV, I subjected Exhibit 3 to the walk-thru metal detector three times at a six-foot, four-foot, and one-foot height. Exhibit 3 successfully went through the walk through metal detector without setting off the alarm.

Further, Exhibit 3 was subjected to a Transportation Safety Administration (TSA) metal detector and x-ray machine testing on March 3-4, 2022. Exhibit 3 went through TSA screening without setting off the alarm while the security exemplar was routinely detected. Exhibit 3 as demonstrated is not as detectable as the security exemplar in a walk-through metal detector and therefore does not comply with 18 U.S.C. § 922(p).

**Exhibit 3**, is designed to and as demonstrated, will expel a projectile by the action of an explosive, and is therefore a “**firearm**” as defined. In addition, the rifling, to any extent that it exists in the Exhibit has no contact with .22 rimfire projectile to impart a spin to stabilize the projectile. In addition, any “rifling” that may have been included in the design is so minimal that it has no effect on the projectile and imparts no stabilizing spin. Therefore, the Exhibit is an “**any other weapon**” as defined.

**Exhibit 4** is a 3D printed TCGTR machinegun conversion device, white in color. As received, there are markings or serial number present on Exhibit 4.

A **Trigger Control Group Travel Reducer** (TCGTR) is designed so that the rear take-down pin lug in an AR-type firearm upper assembly holds the device in place within the fire-control cavity. When an M16-type bolt carrier strikes the top of the device as it moves forward into battery, the front portion of the device engages the tail of the disconnecter releasing the hammer. As long as the trigger is held back, the rearward movement of the bolt carrier will cock the hammer under the disconnecter hook, and the forward movement of the bolt carrier will strike the top portion of the device just as the bolt locks in battery, automatically releasing the hammer and firing the weapon. When the trigger is released, the sear surface of the trigger will capture the hammer in the cocked position negating the operation resulting from the interaction of the TCGTR with the disconnecter.

The Exhibit 4 TCGTR has an approximate length of 1-3/4 and is approximately 1/2-inch at its major width.

Exhibit 4 is a part designed and intended solely and exclusively for use in converting a weapon into a “**machinegun**” as defined.

To demonstrate Exhibit 4 is a part designed and intended for use in converting a weapon into a machinegun, I test fired a host AR15 (Tag #0557728) with Exhibit 4 installed, using a compatible magazine from the NFC and commercially available, American Eagle 7.62x39 caliber ammunition, on December 17, 2021, at the ATF test facility located in Martinsburg, West Virginia. I inserted the magazine containing one round of ammunition into the Exhibit, chambered the round, ensured the selector was in the “Fire” position, and pulled the trigger. The NFC AR15 successfully expelled a single projectile by the action of an explosive. Next, I inserted a two-round ammunition load into the Exhibit and repeated the test. The Exhibit expelled both rounds of ammunition automatically, without manual reloading by a single function of the trigger.

**Findings (cont.):**

Next, I inserted a magazine containing three rounds of ammunition into the NFC AR15, chambered the first round, pressed the trigger. The NFC AR15, with Exhibit 4 installed, fired all three rounds of ammunition automatically, without manual reloading by a single function of the trigger. I repeated this method of test-fire two additional time, achieving the same result.

Exhibit 4 is designed to and through demonstration successfully converted the semiautomatic NFC AR15 rifle into a “**machinegun**”; therefore, Exhibit 4 is a “**machinegun**” as defined.

**Conclusions:**

**Exhibit 1**, being a device for silencing, muffling, or diminishing the report of a portable firearm, is a “**firearm silencer**” as defined in 18 U.S.C. § 921(a)(24).

**Exhibit 1**, being a firearm silencer, is a “**firearm**” as defined in 18 U.S.C. § 921(a)(3)(C).

**Exhibit 1** is a silencer by design, construction, and function; therefore, it is also a “**firearm**” as defined in 26 U.S.C. § 5845(a)(7).

**Exhibit 1** bears no NFA manufacturer or maker’s marks of identification or serial number as required by 26 U.S.C. § 5842.

**Exhibit 2**, being a device for silencing, muffling, or diminishing the report of a portable firearm, is a “**firearm silencer**” as defined in 18 U.S.C. § 921(a)(24).

**Exhibit 2**, being a firearm silencer, is a “**firearm**” as defined in 18 U.S.C. § 921(a)(3)(C).

**Exhibit 2** is a silencer by design, construction, and function; therefore, it is also a “**firearm**” as defined in 26 U.S.C. § 5845(a)(7).

**Exhibit 2** bears no NFA manufacturer or maker’s marks of identification or serial number as required by 26 U.S.C. § 5842.

**Exhibit 2A**, in and of itself, being a part only for use in assembling or fabricating a firearm silencer, is a “**firearm silencer**” as defined in 18 U.S.C. § 921(a)(24).

**Exhibit 2A** is a “**firearm**” as defined in 18 U.S.C. § 921(a)(3)(C).

**Exhibit 2A** is a “**silencer**” as defined in 18 U.S.C. § 921(a)(24); therefore, it is also a “**firearm**” as defined in 26 U.S.C. § 5845(a)(7).

**Exhibit 2A** bears no NFA manufacturer’s or maker’s marks of identification or serial number as required by 26 U.S.C. § 5842.



**Conclusions (cont.):**

**Exhibit 3** is a weapon which is designed to expel a projectile by the action of an explosive; therefore, Exhibit 3 is a “**firearm**” as defined in 18 U.S.C. § 921(a)(3)(A) and (B).

**Exhibit 3** is not as detectable as the Security Exemplar and therefore is in violation of 18 U.S.C. § 922(p).

**Exhibit 3**, being a weapon capable of being concealed on the person from which a shot can be discharged through the energy of an explosive, and having a smooth bore, is an “**any other weapon**” as defined in 26 U.S.C. § 5845(a)(5).

**Exhibit 3**, being an “**any other weapon**”, is also a “**firearm**” as defined in 26 U.S.C. § 5845(e).

Exhibit 3 bears no NFA manufacturer’s or maker’s marks of identification or serial number as required by 26 U.S.C. § 5842.

**Exhibit 4** is a part, designed and intended, solely and exclusively for use in converting a weapon into a machinegun; therefore, Exhibit 4 is a “**machinegun**” as defined in 26 U.S.C. § 5845(b).

Being a machinegun, **Exhibit 4** is a “**firearm**” as defined in 26 U.S.C. § 5845(a)(6).

**Exhibit 4** is a “**machinegun**” as defined in 18 U.S.C. § 921(a)(23).

**Exhibits 4** bears no NFA manufacturer’s marks of identification or serial number as required by 26 U.S.C. § 5842.

Examined by:

---

Leonard P. Reloza  
Firearms Enforcement Officer

Approved by:

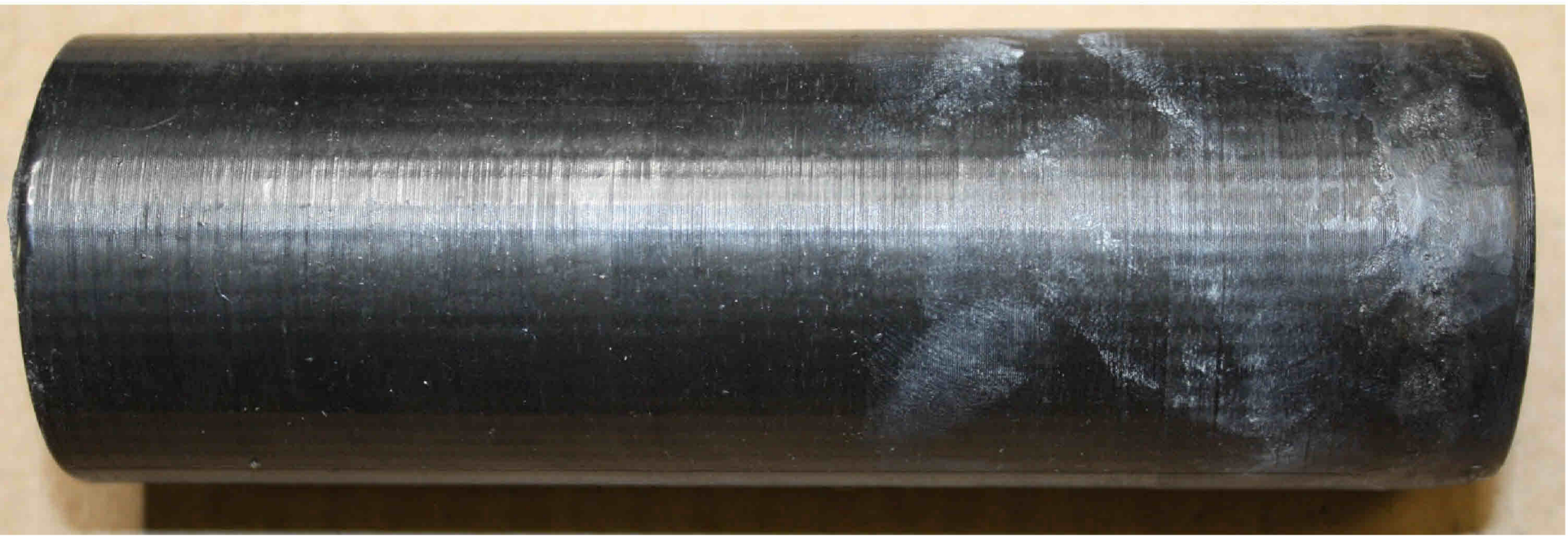
---

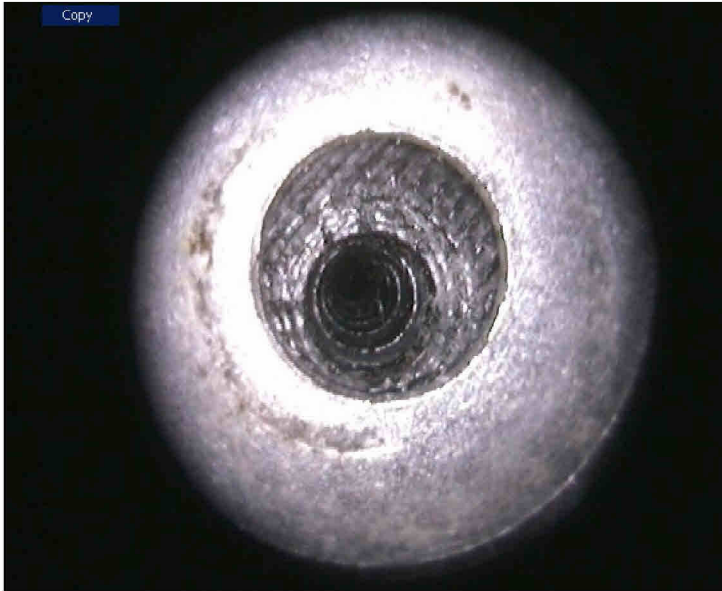
Gregory S. Stimmel  
Chief, Firearms Technology Criminal Branch

Attachments: 27 pages bearing photographs

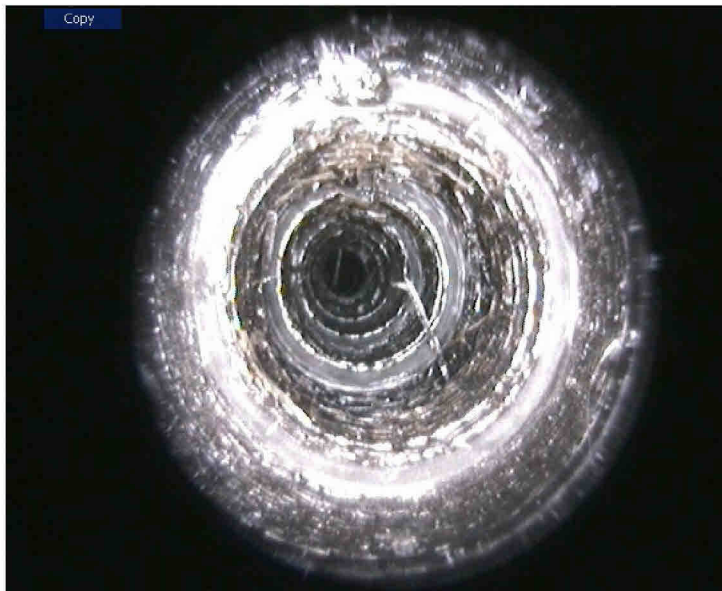
**Enclosed is a Firearms Technology Criminal Branch report provided in response to your request for assistance. Please be aware that these documents constitute “taxpayer return information” that is subject to the strict disclosure limitations provided in 26 U.S.C. § 6103. Exceptions to the non-disclosure provisions that permit the disclosure internally within ATF are set forth in 26 U.S.C. § 6103(h)(2)(C) and (o)(1). Any further disclosure of these reports is strictly limited and must be reviewed and approved by the Office of Chief Counsel prior to any information dissemination. Failure to adhere to the disclosure limitations provided in 26 U.S.C. § 6103 could result in civil and/or criminal liability.**







Blast chamber view

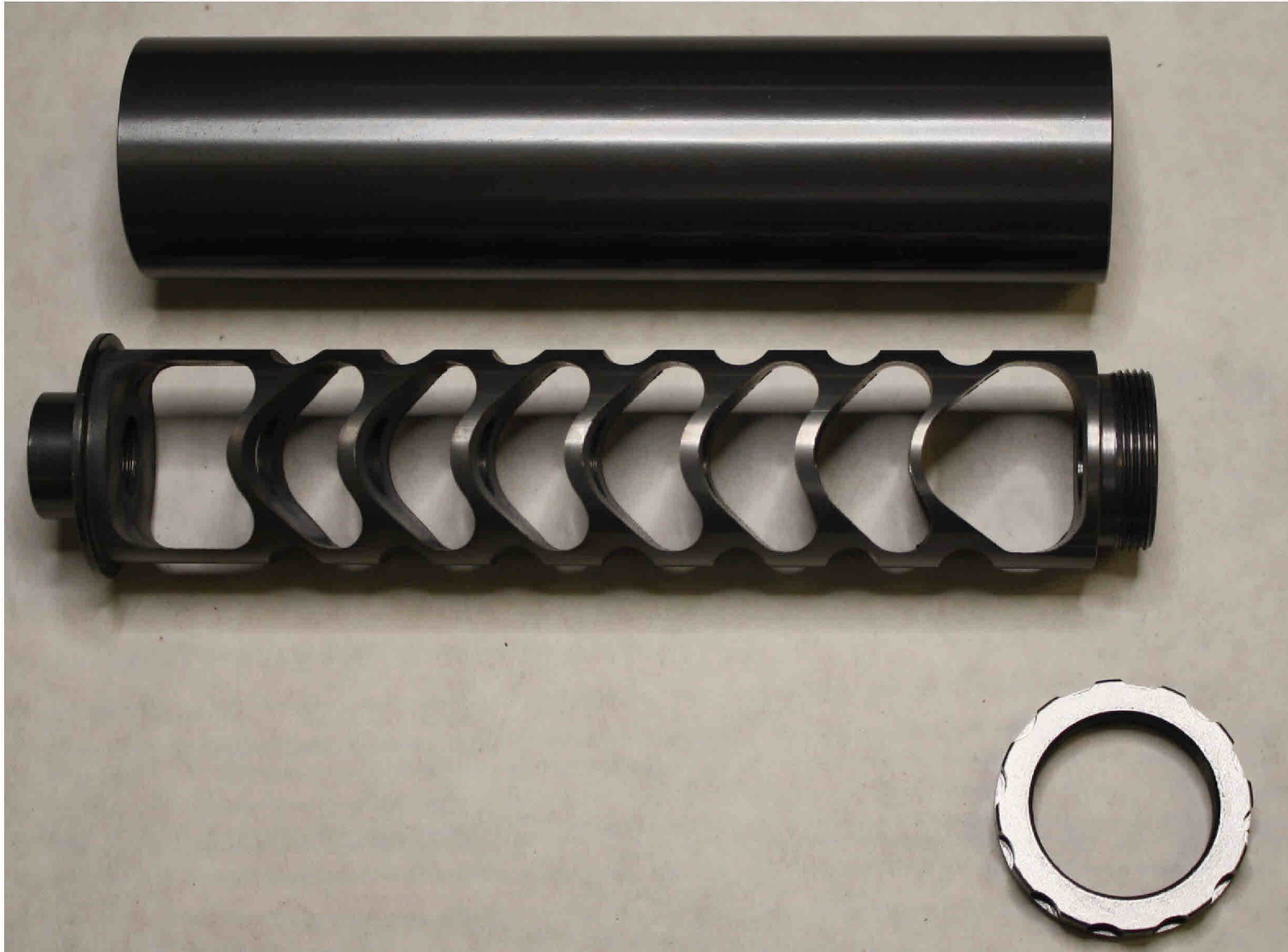


Baffle stack view (7 baffles)









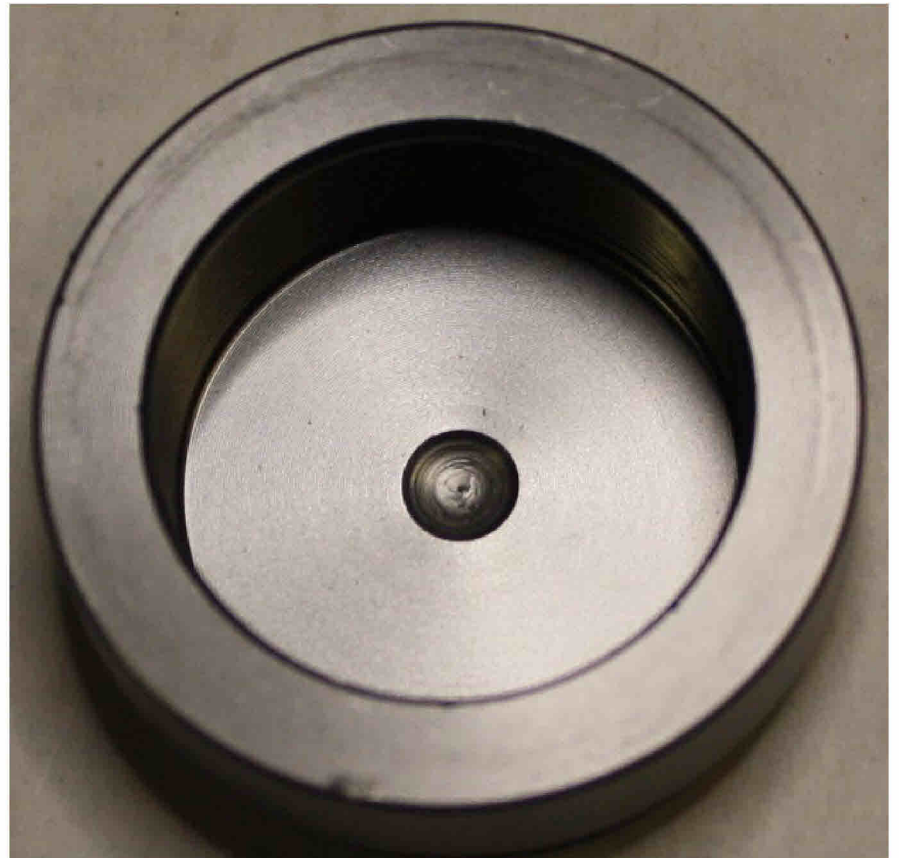


Exhibit 2A front and back view





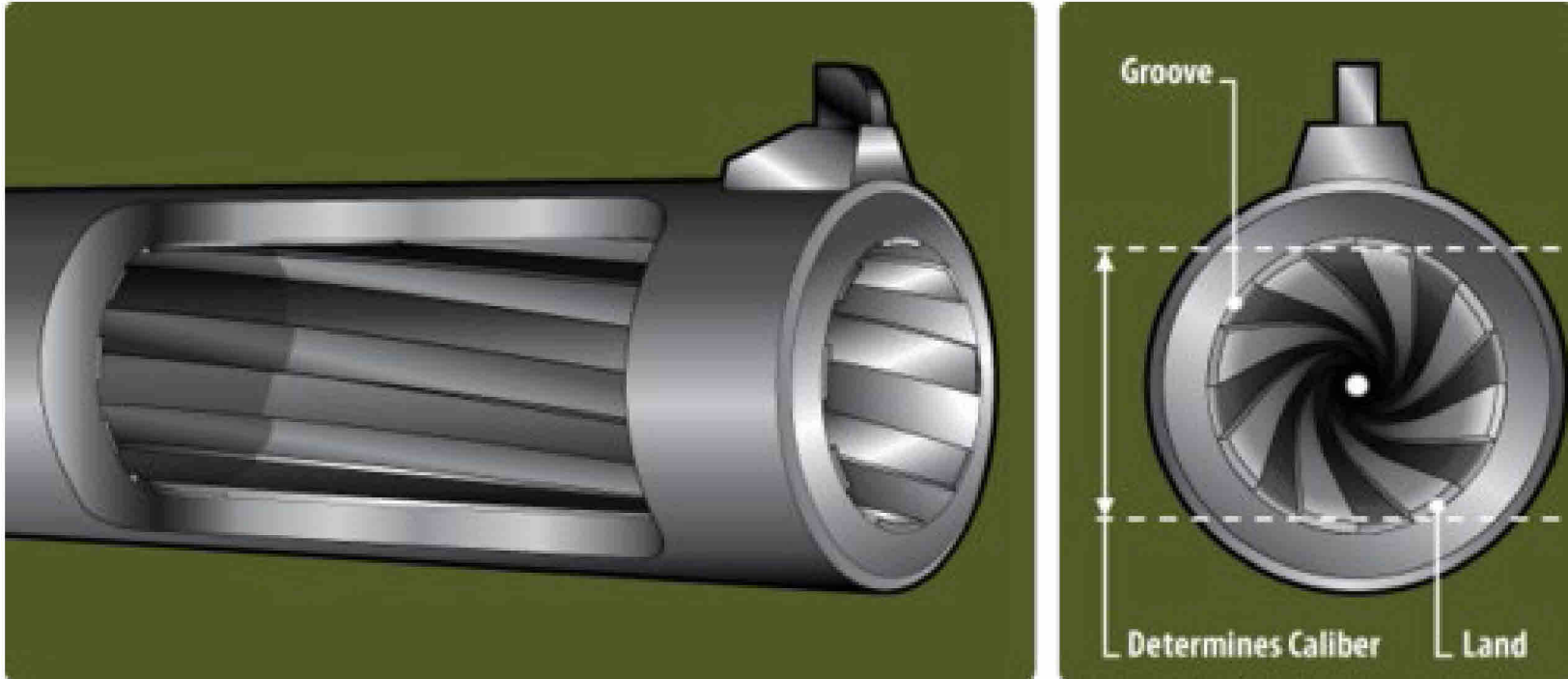


WASHBURN

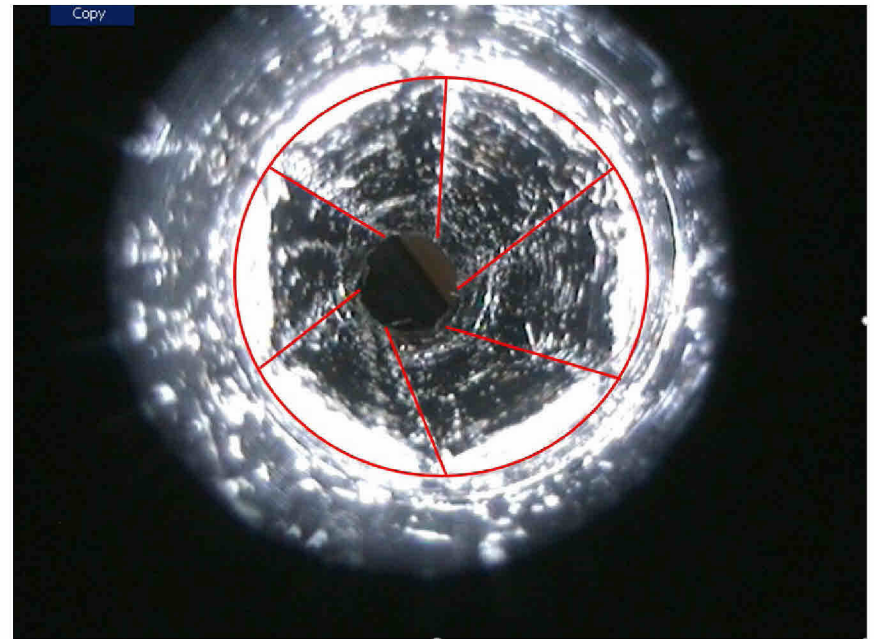
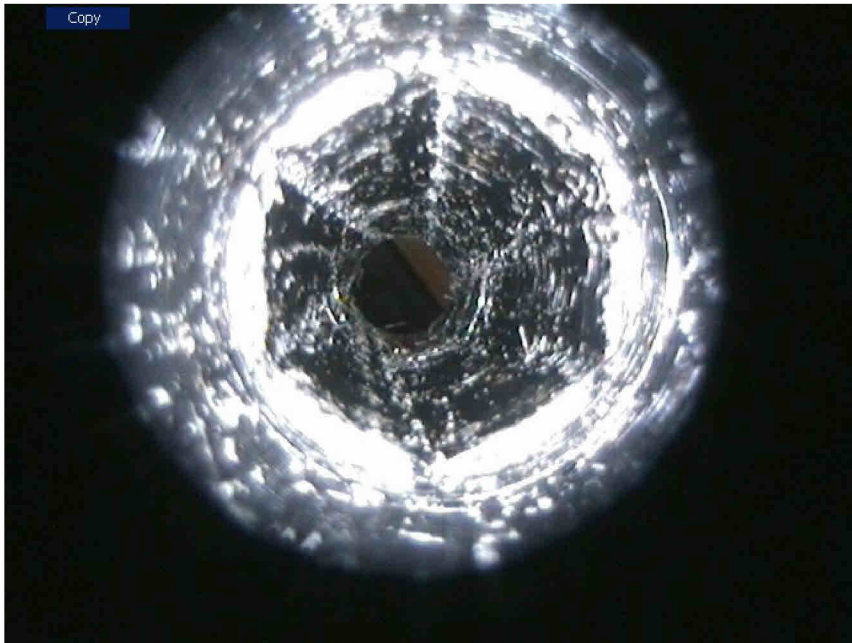
PATRICK

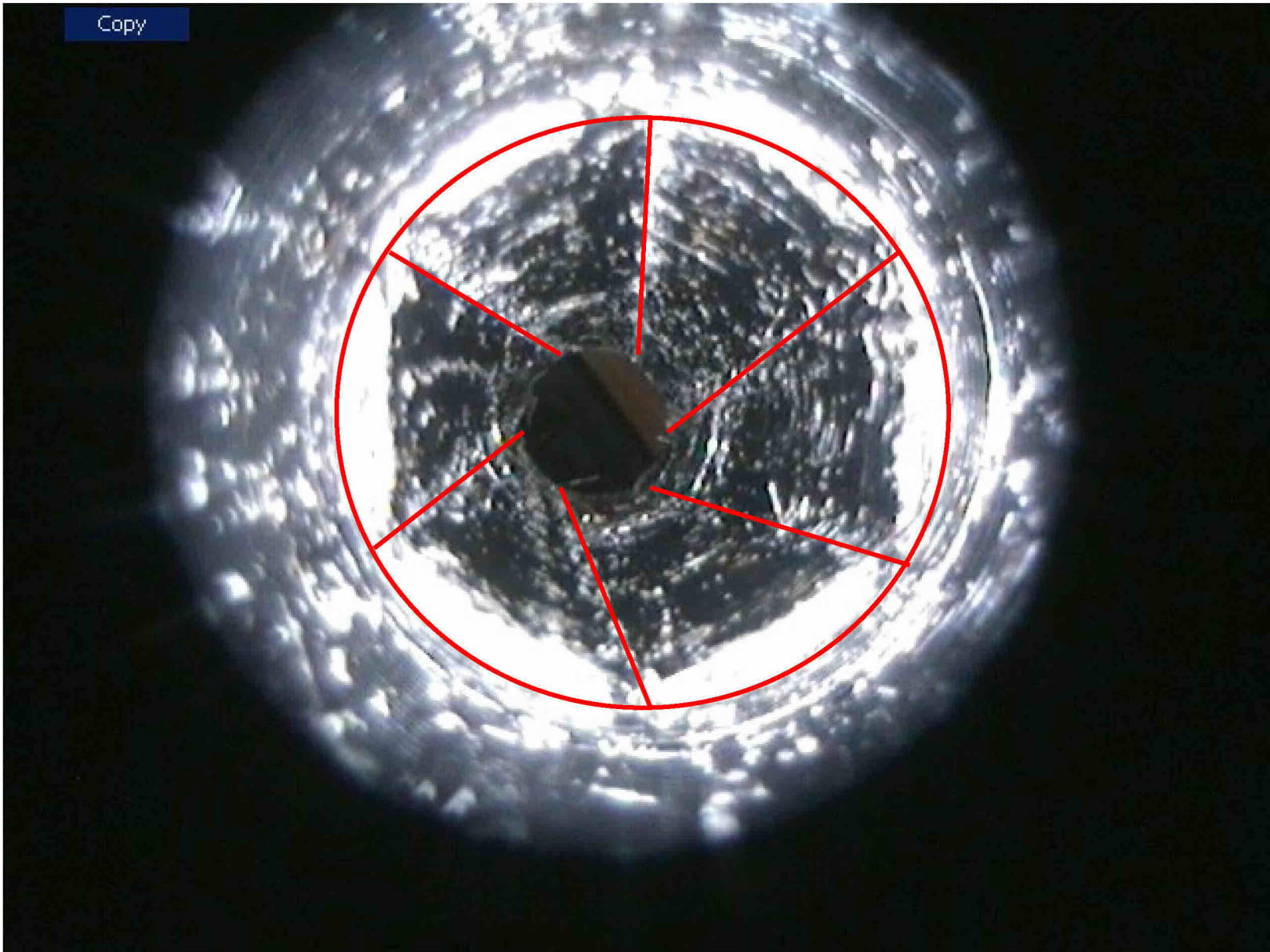


## Visual Depiction of Lands, Grooves, and Twist











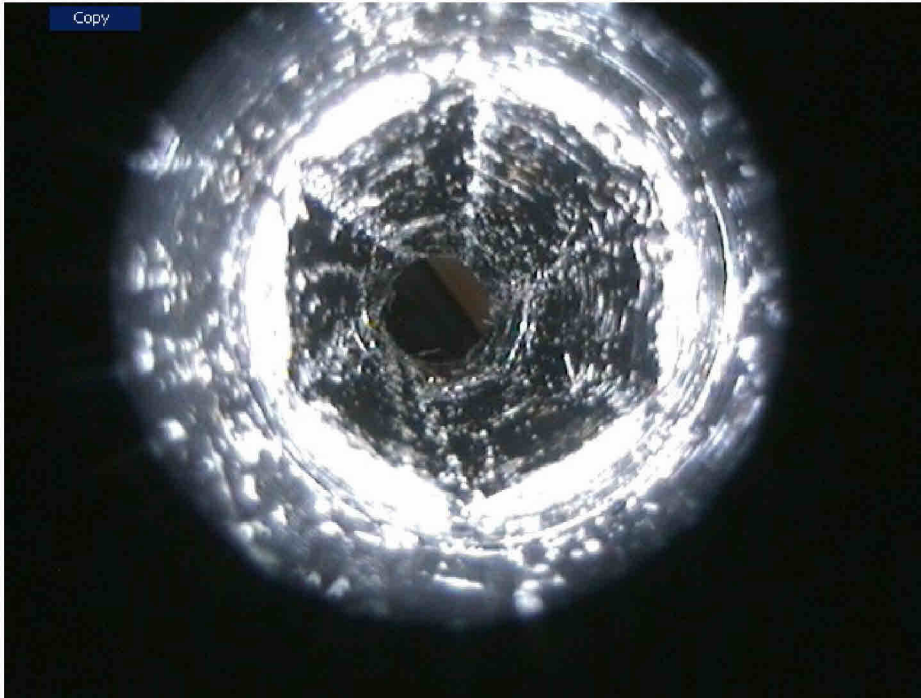
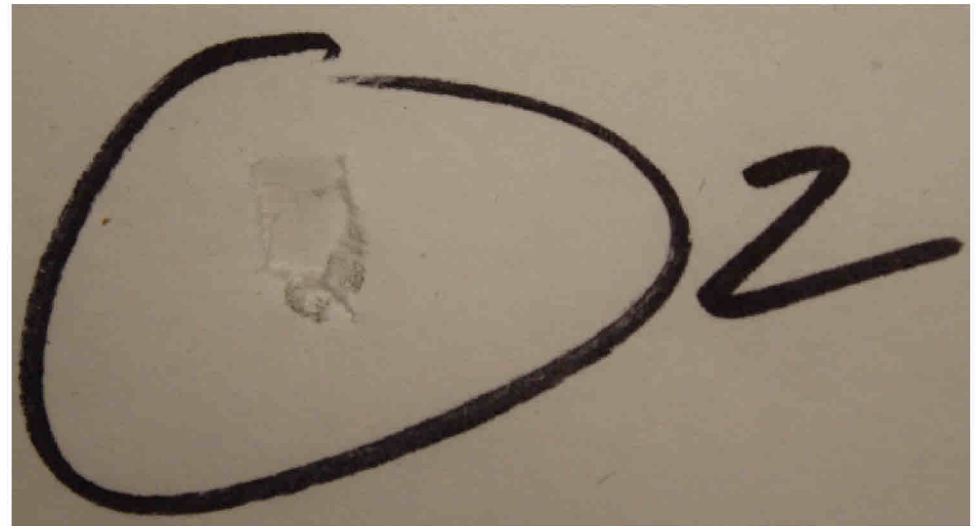
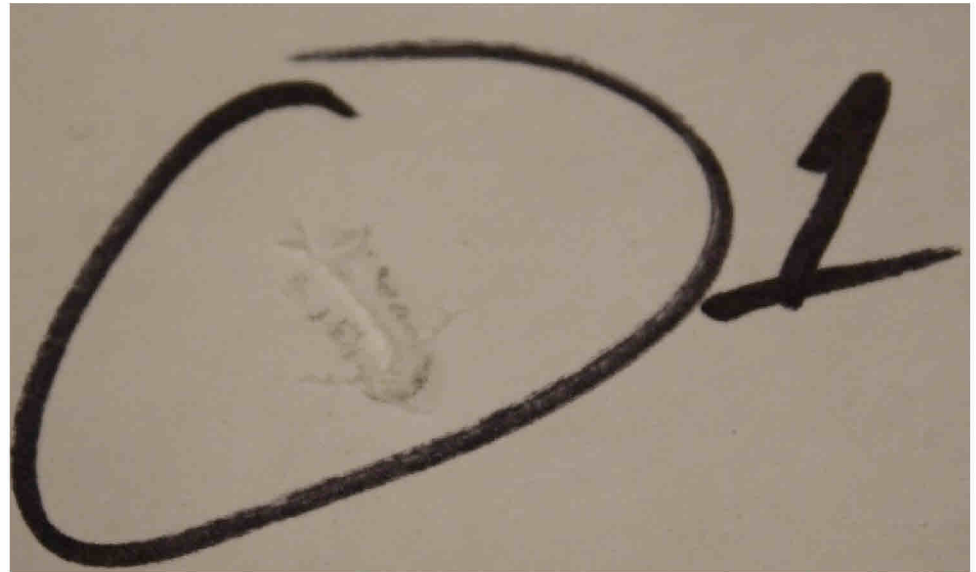
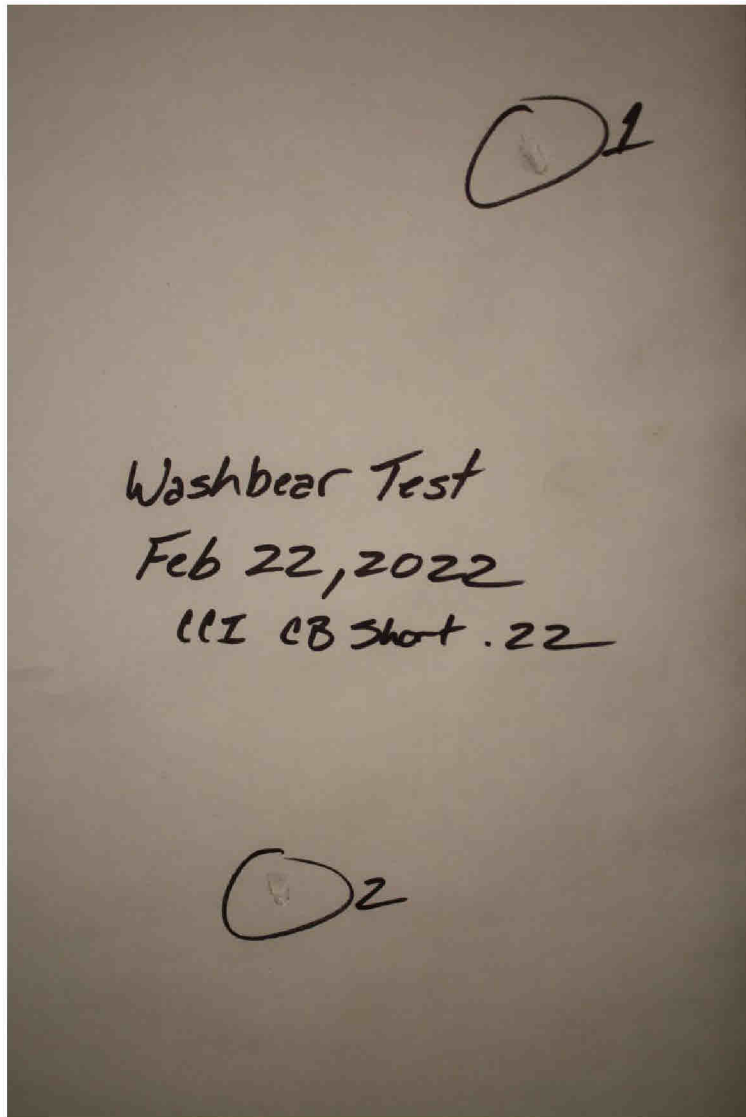
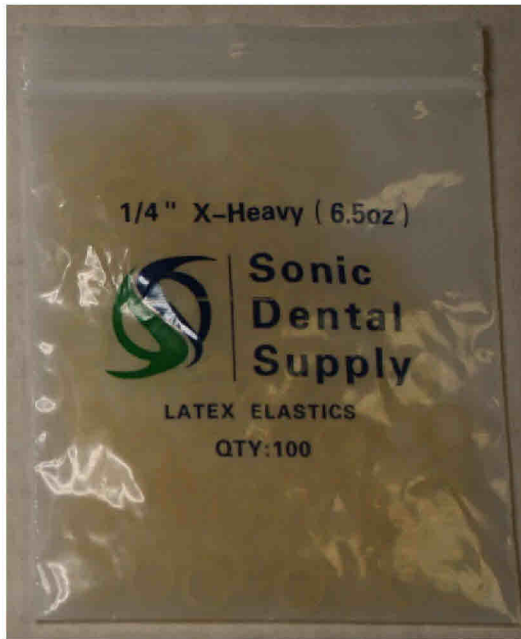


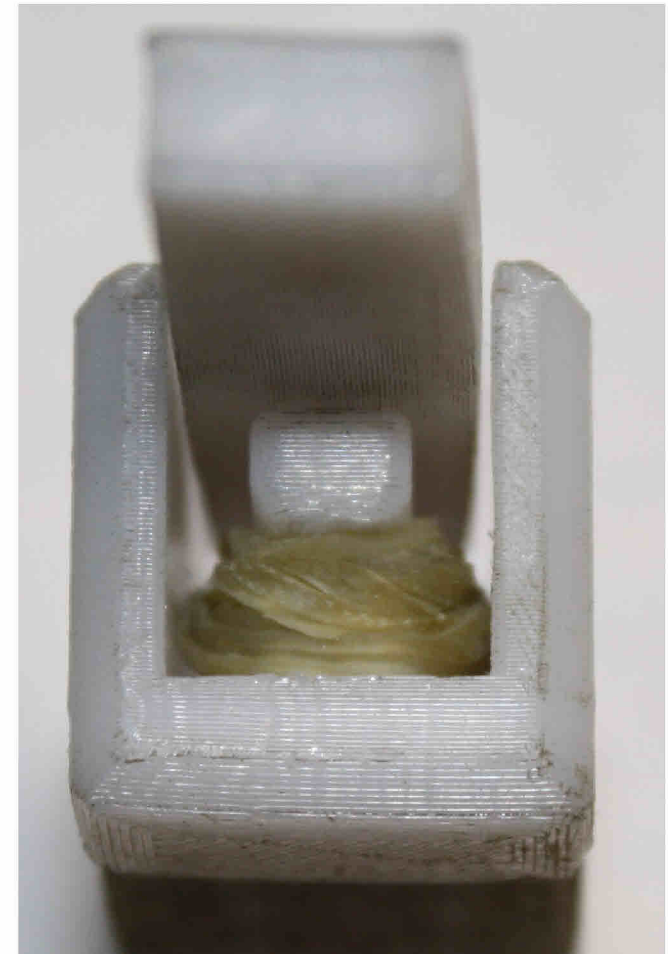
Exhibit 3 internal barrel profile (left) compared to Exemplar S&W Mod.651 .22 cal rifled bore (right)

A .22 caliber rimfire bullet has a diameter of .225", .004" to .017" less than the internal bore diameter of Exhibit 3.



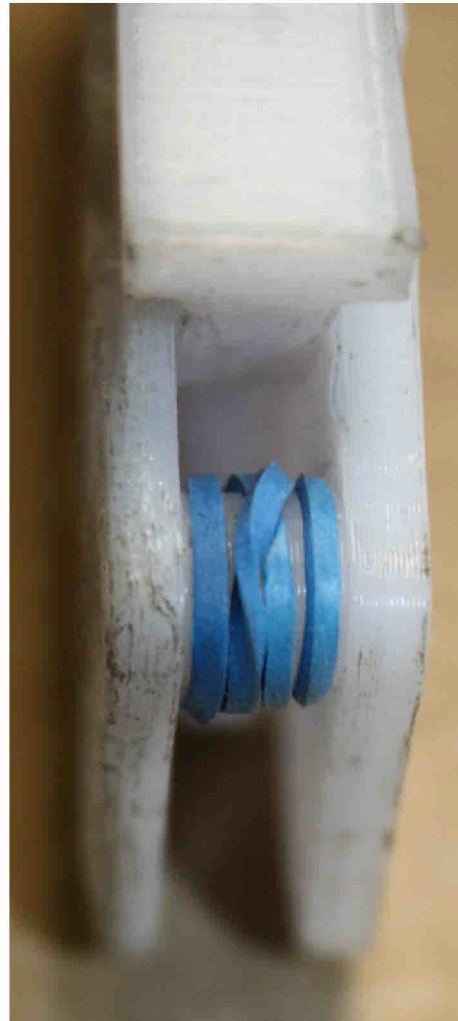
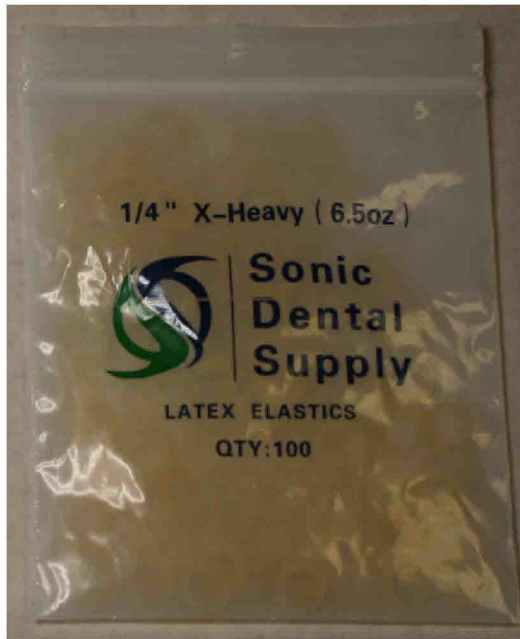


Original rubber band

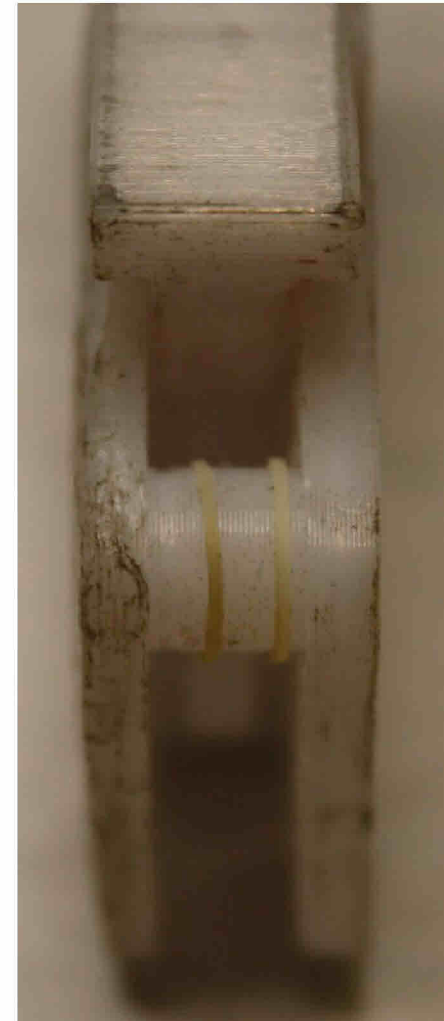


Replacement rubber band

# Exhibit 3 replacement rubber bands



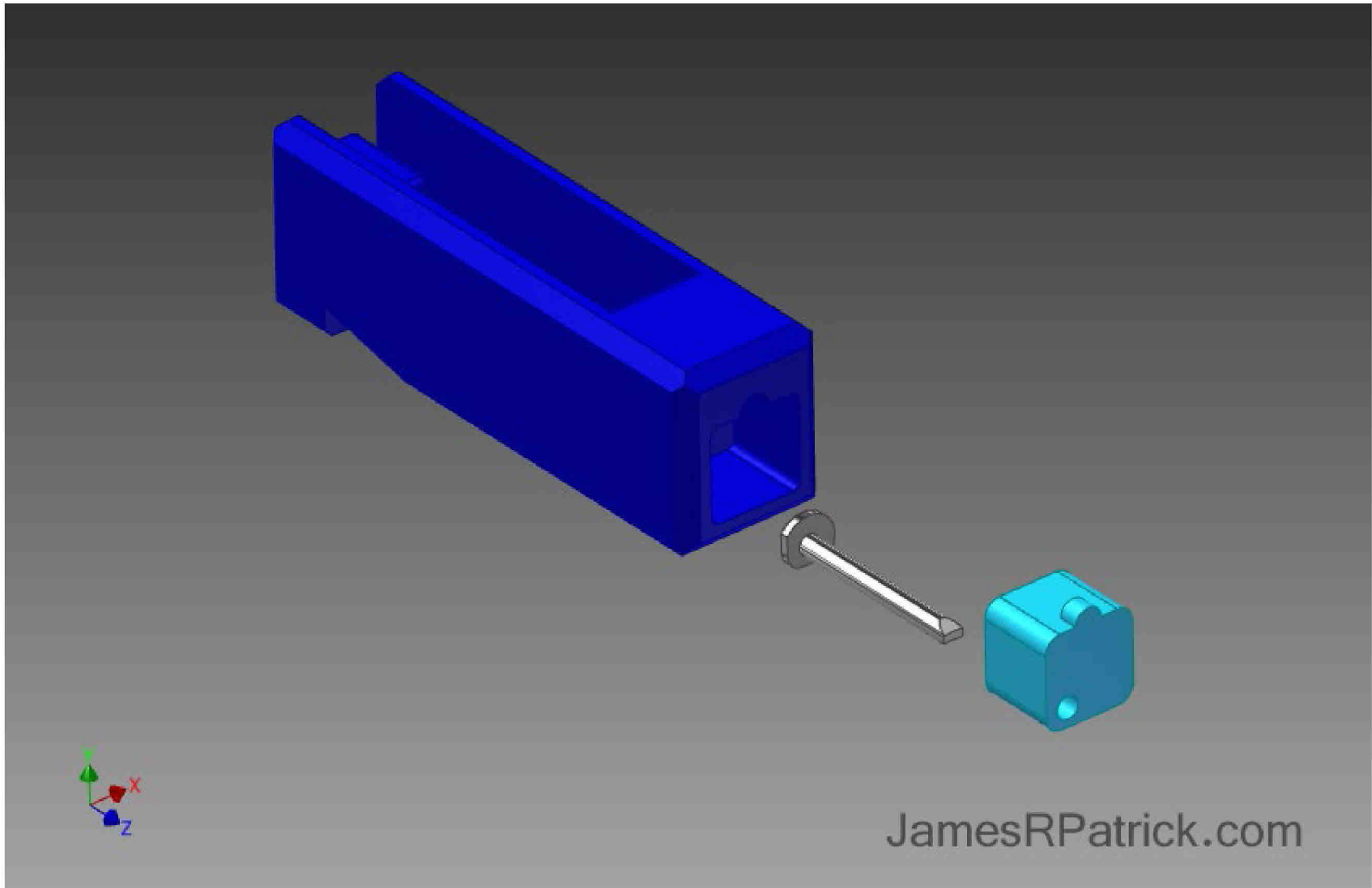
Original rubber band



Replacement rubber band

# Exhibit 3 replacement rubber band





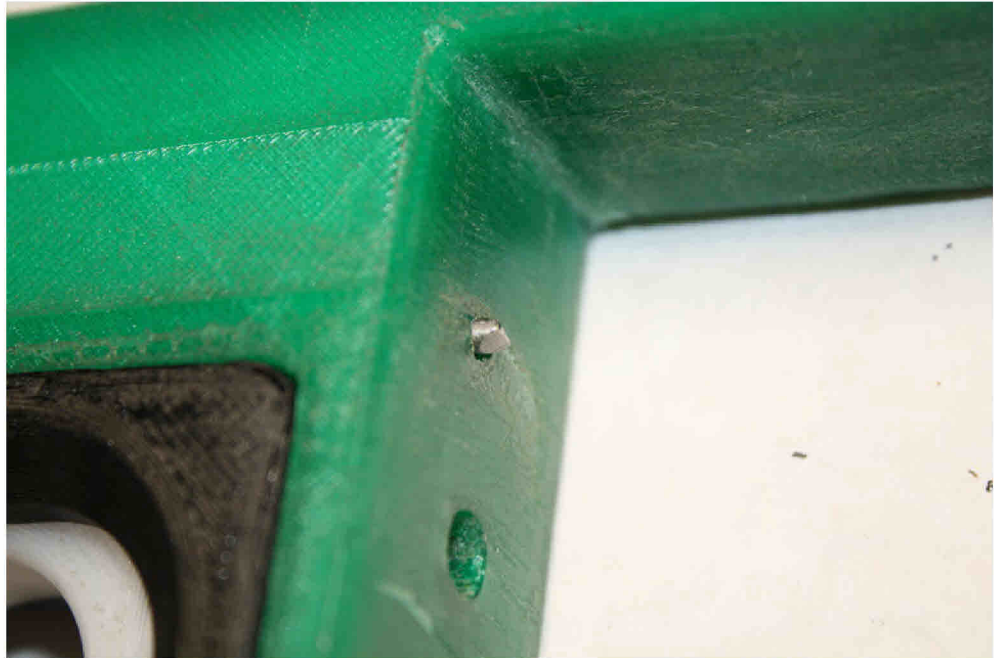
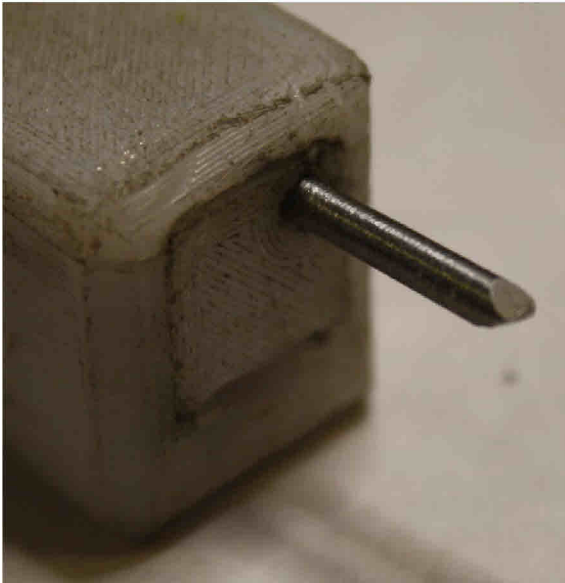
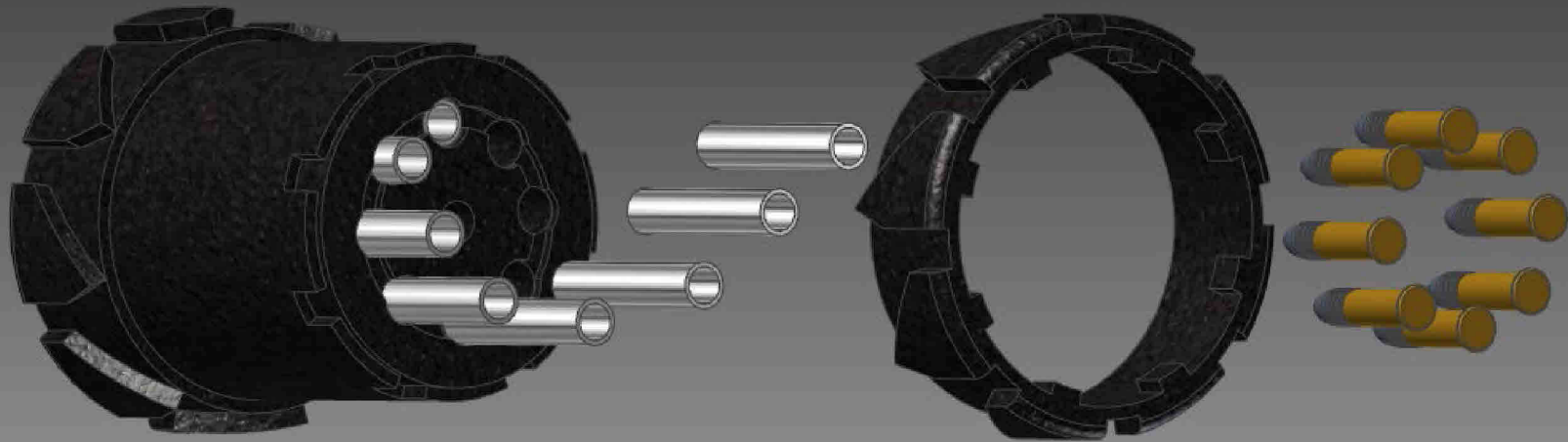


Exhibit 3 improvised firing pin



JamesRPatrick.com

# Barrel assembly with steel inserts

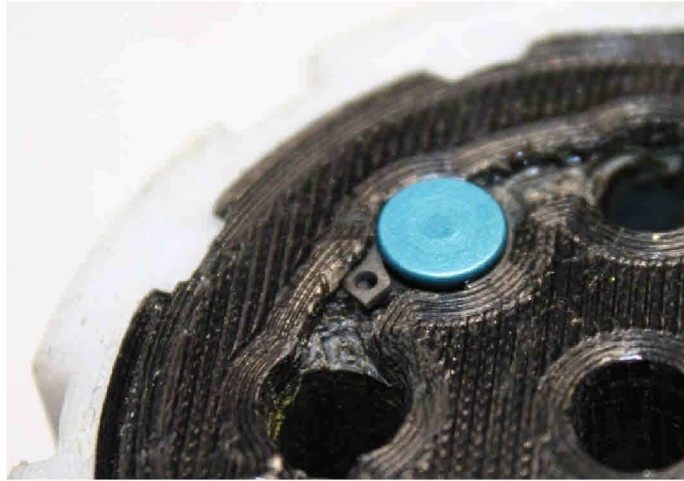


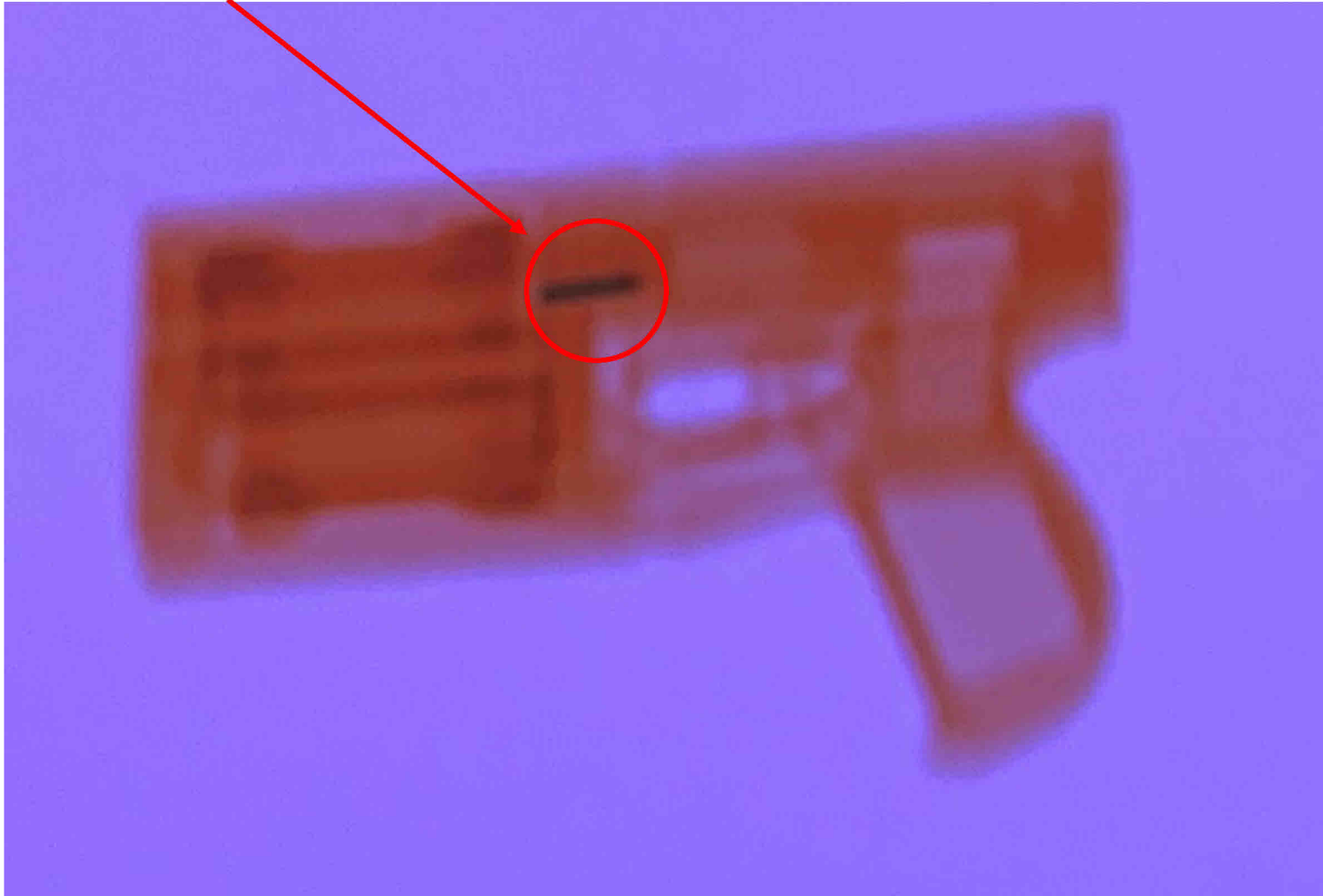
Exhibit 3 modified 1/4 inch retaining  
rings

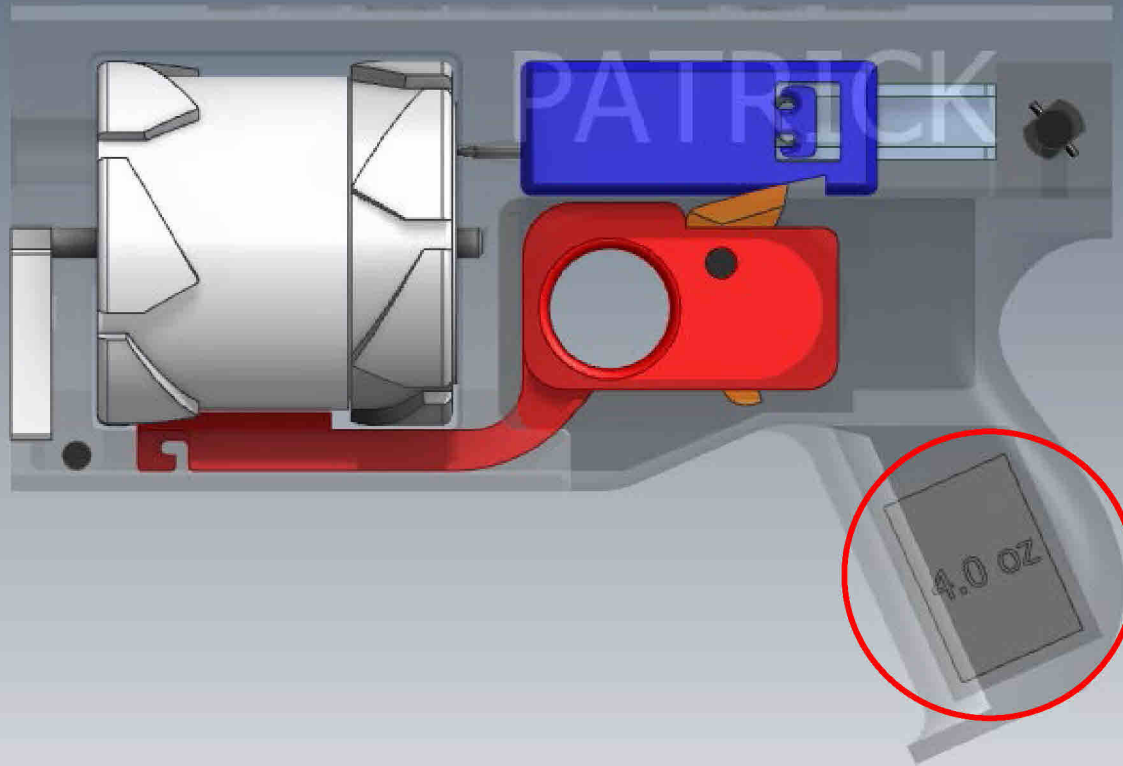




Exhibit 3 barrel assembly loaded  
configuration

Fabricated metal firing pin



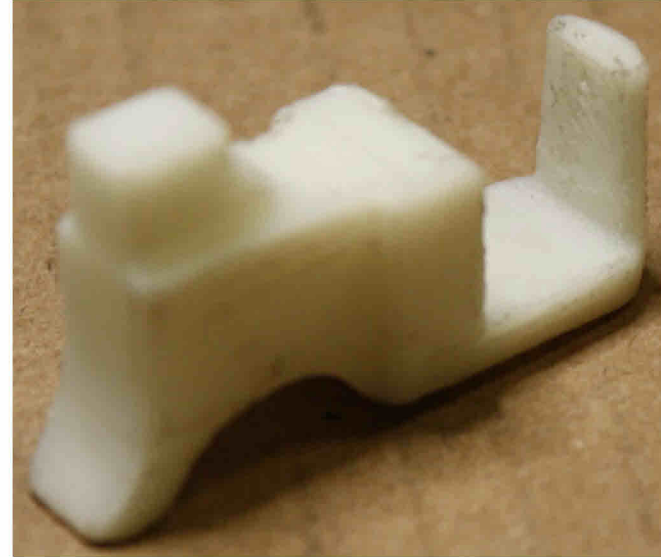
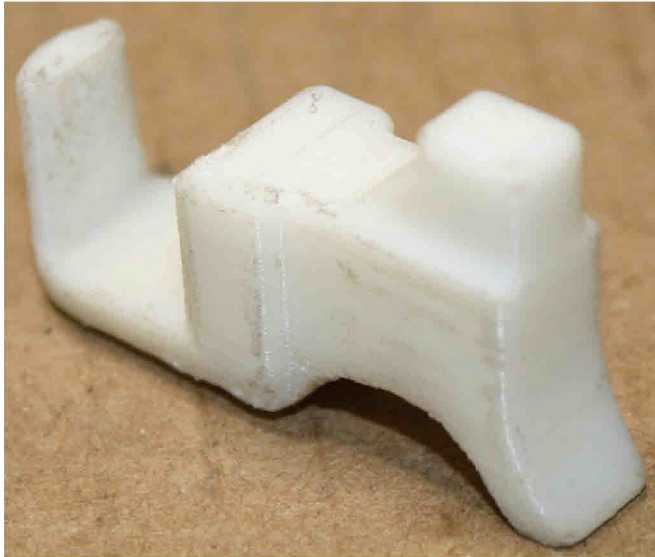


JamesRPatrick.com



Exhibit 3 empty compartment





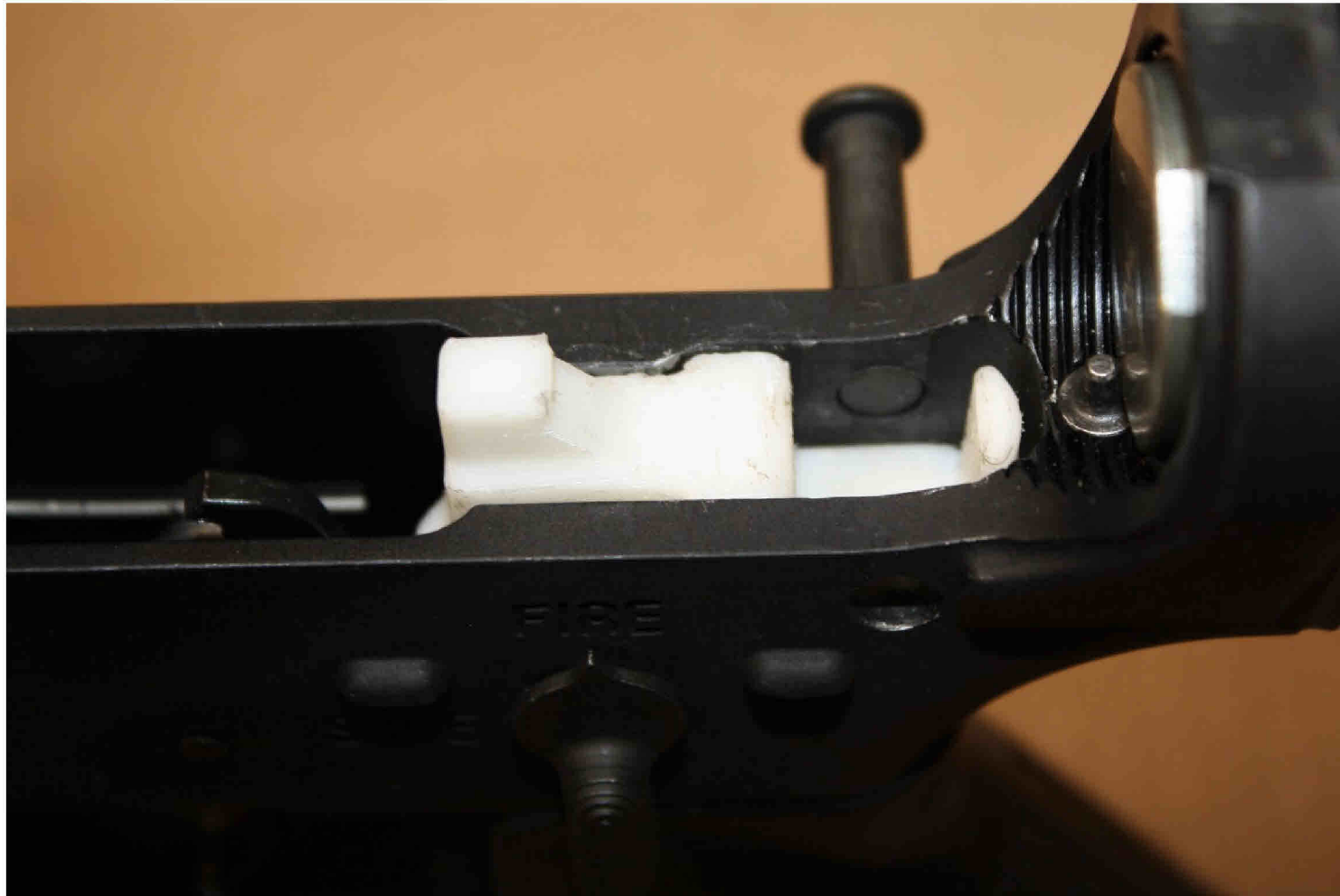


Exhibit 4 installed in NFC AR15